REMARKS

As of the 5 May 2009 Final Office Action, Claims 1-9, 11-13, 45-46, 49-50, and 52-53 are pending in the Application. In the Office Action, the Examiner rejects all pending claims. Applicant thanks the Examiner for the careful examination given to the Application. By this Response, Applicant presents arguments regarding the merits of the claim rejections.

Applicant submits this response solely to facilitate prosecution. As such, Applicant reserves the right to present new or additional claims in this Application that have similar or broader scope as originally filed. Applicant also reserves the right to present additional claims in a later-filed continuation application that have similar or broader scope as originally filed. Accordingly, any amendment, argument, or claim cancellation presented during prosecution is not to be construed as abandonment or disclaimer of subject matter.

After entry of this *Response*, Claims 1-9, 11-13, 45-46, 49-50, and 52-53 are pending in the Application. Applicant respectfully submits that the pending claims are in condition for allowance over the references of record, and respectfully requests reconsideration of the claims in light of this submission. Applicant, accordingly, believes that the Application is allowable for at least the following reasons.

I. Claim Rejections Under 35 U.S.C. §112

Claims 1 and 45 are rejected under 35 U.S.C. §112, first paragraph, because "greater than or equal to that of felt paper" and "consists of flashspun high-density polyethylene fibers" are features allegedly not supported by the originally filed *Specification*. Claim 45 is rejected under 35 U.S.C. §112, second paragraph, because of the term "having" recited in line three. Applicant respectfully submits that Claims 1 and 45 have been amended to address these issues and requests withdrawal of these rejections.

II. Rejections Under 35 U.S.C. §103

In the Office Action, Claims 1, 8-9, 13, and 52 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent No. 3,284,980 to <u>Dinkel</u> in view of U.S. Patent No. 6,187,409 to Mathieu and U.S. Patent No. 2,475,781 to Gallup.

Claims 2, 3-4, and 7 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Dinkel, Mathieu, Gallup, and U.S. Patent No. 4,722,866 to Wilson et al.

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Claims 5 and 11 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Dinkel, in view of Mathieu, Wilson, and Gallup, further in view of U.S. Patent No. 4.828.635 to Flack et al.

Claims 6 and 12 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Dinkel, in view of Mathieu, Wilson, and Gallup, further in view of U.S. Patent No. 4.450.022 to Galer ("Galer").

Claims 45-46 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over <u>Dinkel</u> in view of <u>Gallup</u> in further view of alleged applicant admitted prior.

Claim 50 is rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over <u>Dinkel</u>, in view of <u>Mathieu</u> and <u>Gallup</u>, further in view of <u>Wilson</u>.

Claim 53 is rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Dinkel in view of Gallup in further view of alleged applicant admitted prior.

Applicant respectfully submits that the cited references fail to disclose each and every claimed feature for the following reasons.

a. The Cited References Fail Disclose A Construction Element Having A Reinforcement Mesh Embedded In Only One Side

Throughout prosecution of this Application, Applicant has reiterated a fundamental distinction between the prior art and the invention, which the Examiner has repeatedly failed to address. That distinction being that the prior art, particularly <u>Dinkel</u>, discloses a construction element having reinforcement mesh embedded in both its upper and lower surfaces, while the claimed invention has reinforcement mesh embedded in only one of the surfaces. Applicant has stated numerous times that the Examiner has failed to provide a reason or rationale as to why one of skill in the art would have removed the reinforcement mesh from one <u>Dinkel</u>'s surface. In this Office Action, the Examiner continues to ignore this argument.

On page 4 of the Office Action, the Examiner alleges that Gallup shows a "core having the lower principal face not having reinforcement mesh material embedded in or adhered to the lower principal surface." The Examiner alleges that one of ordinary skill in the art would have been motivated by Gallup to modify Dinkel's structure such that the lower surface of Dinkel's panel does not have mesh embedded therein. Applicant respectfully disagrees. As in all of the previous rejections under \$103(a), the Examiner fails to provide an adequate rationale for the proposed modification.

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Gallup discloses a panel having a concrete core with upper and lower surfaces both devoid of a reinforcement mesh. The Examiner chooses to focus on the fact that the lower surface of Gallup's element is lacking a reinforcement mesh, and concludes that this would have motivated one of skill in the art to remove the reinforcement mesh from one of the sides of Dinkel's element. The Examiner does not provide a reason, however, for why one of skill in the art would actually want to remove a reinforcement mesh from Dinkel's element. Just because Gallup has a panel without reinforcement mesh does not mean that the mesh from Dinkel's element should be removed. The mesh in Dinkel's panel serves the clear purpose of reinforcing the panel. One of ordinary skill would not remove the mesh simply because Gallup, a 50 year old piece of prior art, shows a panel without reinforcement mesh. Indeed, one of skill in the art would more likely conclude that the reason Gallup does not disclose reinforcement mesh in its construction panel is because in 1943 mesh may not have been used to strengthen construction panels, rather than concluding that Gallup explicity teaches making construction panels without mesh reinforcement. One of ordinary skill would certainly not blindly adopt a feature of Gallup's design that would weaken Dinkel's panel.

Additionally, one of skill in the art would not randomly choose to adopt only a single aspect of <u>Gallup</u>'s design. <u>Gallup</u> discloses both upper and lower surfaces being devoid of mesh. Applicant respectfully submits that there is no reason why one of ordinary skill would have been motivated by <u>Gallup</u>'s disclosure to remove mesh from only *one* side of <u>Dinkel</u>'s construction element, rather than both sides in order to more closely resemble <u>Gallup</u>'s panel. Applicant respectfully submits that if one of skill in the art did actually decide upon reviewing <u>Gallup</u> to remove reinforcement mesh from <u>Dinkel</u>'s panel, he/she would remove mesh from both sides of the panel to mimic <u>Gallup</u>'s actual design, which would result in a product structurally different from the claimed invention.

On page 5 of the Office Action, the Examiner provides a single, generic rationale for at least seven structurally distinct modifications to Dinkel's design necessary to arrive at the claimed invention. The rationale being that the modifications would have been obvious "in order to provide a construction element that is highly resistant to water penetration." Many of the modifications that the Examiner proposes, however, are entirely unrelated to increasing resistance to water penetration. In particular, removing reinforcement mesh from one surface of Dinkel's panel would not have improved resistance to water penetration. Therefore, Applicant

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respectfully submits that the Examiner has failed to provide a reason or rationale why the proposed modifications would actually have been obvious.

b. The Cited References Fail To Disclose An Impervious Web As Recited In the

Applicant respectfully submits that the cited references fail to disclose an impervious web or membrane as recited in the Claims. On page 3 of the Office Action, the Examiner admits that Dinkel fails to disclose the recited impervious membrane. The Examiner asserts, however, that Gallup discloses a liner corresponding to the claimed impervious membrane. Applicant respectfully disagrees and submits that one of ordinary skill in the art would not have been motivated to incorporate Gallup's liner into Dinkel's design, and that Gallup's liner is not equivalent to the claimed impervious membrane.

One of ordinary skill would not modify <u>Dinkel</u>'s construction element to include <u>Gallup</u>'s liner because adding such a liner would substantially weaken the construction element. <u>Gallup</u>'s liners are not inherently adhesive and no adhesive substance is used to attach them to the core. The liners must be fused to the core with high heat ranging from 200 to 300 F, which softens the core allowing it to meld with the surface of the liners. (<u>Gallup</u>, Col. 3, Lns. 1-45). Heating a concrete core to these temperatures before the concrete core has naturally hydrated would cause the core to lose considerable strength and would result in a composite which would be unsuitable for use as a concrete backerboard. Therefore, it would not have been obvious to one of skill in the art to modify <u>Dinkel</u> to include <u>Gallup</u>'s liners because of the resulting loss of structural integrity.

Additionally, <u>Gallup</u>'s liner is not equivalent to the claimed impervious membrane. In ¶[0024] of the published *Specification*, Applicant has clearly defined an "impervious" material to be highly resistant to free water penetration, but *enabling water vapor penetration*. This particular quality is very important for concrete backerboards because it eliminates build up of condensation in the stud cavity when installed on an exterior wall. <u>Gallup</u> discloses several different types of materials that may be used to construct the liners. (<u>Gallup</u>, Col. 3, Lns. 14-24). These materials, however, are *not permeable to water vapor*. Consequently, <u>Gallup</u>'s liners are not permeable to water vapor and are not equivalent to the claimed impervious web or membrane.

For at least these reasons, the cited references, alone or in combination, fail to disclose, teach or suggest each and every feature of Claims 1, 8, 45, 52, and 53. Thus, Applicant

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respectfully submits that Claims 1, 8, 45, 52, and 53 are patentable over the cited references, and are in condition for allowance. Further, Claims 2-7, 9, 11-13, 46, and 49-50, are also believed to be in condition for allowance at least due to their dependence upon Claims 1, 8, and 45, and

further features defined therein.

III. Fees

Applicant files this Response within five months of the 5 May 2009 Office Action. Thus, a two month extension of time fee is believed due and is paid via EFS-Web. This Response does

not present any additional claims beyond those paid for upon filing. Thus, no additional claim

fees are believed due. This Response is filed with a Request for Continued Examination ("RCE")

pursuant to 37 CFR §1.114, and the required RCE fee is paid via EFS-Web. No other fees are

believed due. The Commissioner is authorized, however, to charge any fees that may be

required, or credit any overpayment, to Deposit Account No. 20-1507 for full acceptance of this

submission, and to keep the Application pending.

IV. Conclusion

This Response is believed to be a complete response pursuant to 37 CFR §1.121.

Applicant respectfully submits that after entry of this Response the Application is fully in condition for allowance. The Examiner is invited to contact the undersigned should any other

issues remain prior to the allowance of this Application. Early and favorable action is

 $respectfully\ requested.$

Respectfully submitted,

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